TO: Examiner Tecklu

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Mark Nathan Wain, et al.**	Confirmation No.: **1285**
Application No.: **10/678,870**	Group Art Unit: **2192**
Filing Date: **October 3, 2003**	Examiner: **Isaac Tuku Tecklu**
For: **Extensible Multi-Language Compilation**	

REQUEST FOR EXAMINER INTERVIEW

Dear Examiner,

I would like to schedule a telephonic interview at your convenience. Below are proposed claim amendments. Please fax, phone, or email to let me know a convenient time for you.

Sincerely,
Tom Van Zandt

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Proposed Claims Amendments to Independent Claims:

1. (Currently amended) A method for multi-language compilation comprising:

discovering a first compiler component that conforms to a set of interfaces included in ~~which implements~~ a prespecified protocol and provides compilation of code in a first language;

discovering a second compiler component that conforms to the set of interfaces included in ~~which implements~~ said prespecified protocol and provides compilation of code in a second language, wherein the discovery of the first compiler component and the second compiler component is effected using an inter-process communication; and

providing a first framework which uses said first compiler component and said second compiler component to provide multi-language compilation, wherein the framework creates a multi-language compiler based on the first language and the second language.

13. (Currently amended) A method for multi-language code editing comprising:

discovering a first design tool that conforms to a set of interfaces included in ~~which implements~~ a prespecified protocol and provides design assistance for code in a first language;

discovering a second design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in a second language, wherein the discovery of the first design tool and the second design tool is effected using an inter-process communication; and

providing a framework which integrates said first design tool and said second design tool to provide multi-language editing, wherein the framework creates a multi-language design tool based on the first language and the second language.

14. (Currently amended) A method for multi-language code editing comprising:

discovering a first compiler component which implements a prespecified protocol and provides compilation of code in a first language;

discovering a second compiler component that conforms to a set of interfaces included in ~~which implements~~ said prespecified protocol and provides compilation of code in a second language;

discovering a first design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in said first language;

discovering a second design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in said second language, wherein the discovery of the first compiler component, the second compiler component, the first design tool, and the second design tool is effected using an inter-process communication; and

providing a framework which integrates said first compiler component, said second compiler component, said first design tool, and said second design tool to provide multi-language design functionality assisting a user in writing code comprising inter-language reference requirements, wherein the framework creates a multi-language compiler and a multi-language design tool based on the first language and the second language.

15. (Currently amended) A method for multi-language code editing comprising:

discovering a first compiler component which implements a prespecified protocol and provides compilation of code in a first language;

discovering a second compiler component that conforms to a set of interfaces included in ~~which implements~~ said prespecified protocol and provides compilation of code in a second language;

discovering a first design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in said first language;

discovering a second design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in said second language, wherein the discovery of the first compiler component, the second compiler component, the first design tool, and the second design tool is effected using an inter-process communication; and providing a framework which integrates said first compiler component, said second compiler component, said first design tool, and said second design tool to provide multi-language design functionality incorporating background compilation, wherein the framework creates a multi-language compiler and a multi-language design tool based on the first language and the second language.

16. (Currently amended) A method for multi-language compilation comprising:

discovering at least two compiler components that each conform to a set of interfaces included in ~~which each implement~~ a prespecified protocol, wherein each of the at least two compiler components provides compilation of code in a corresponding language and the discovery of the at least two compiler components is effected using an inter-process communication; and

providing a framework which integrates each of said at least two compiler components to provide multi-language compilation, wherein the framework creates a multi-language compiler based on the corresponding languages of the at least two compiler components.

19. (Currently amended) A computer-readable storage medium for multi-language compilation comprising computer executable modules having computer executable instructions, said instructions comprising instructions for:

discovering a first compiler component that conforms to a set of interfaces included in ~~which implements~~ a prespecified protocol and provides compilation of code in a first language;

discovering a second compiler component that conforms to the set of interfaces included in ~~which implements~~ said prespecified protocol and provides compilation of code in a second language, wherein the discovery of the first compiler component and the second compiler component is effected using an inter-process communication; and

providing a first framework which uses said first compiler component and said second compiler component to provide multi-language compilation, wherein the framework creates a multi-language compiler based on the first language and the second language.

31. (Currently amended) A computer-readable storage medium for multi-language code editing comprising computer executable modules having computer executable instructions, said instructions comprising instructions for:

discovering a first design tool that conforms to a set of interfaces included in ~~which implements~~ a prespecified protocol and provides design assistance for code in a first language;

discovering a second design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in a second language, wherein the discovery of the first design tool and the second design tool is effected using an inter-process communication; and

providing a framework which integrates said first design tool and said second design tool to provide multi-language editing, wherein the framework creates a multi-language design tool based on the first language and the second language.

32. (Currently amended) A computer-readable storage medium for multi-language code editing comprising computer executable modules having computer executable instructions, said instructions comprising instructions for:

discovering a first compiler component which implements a prespecified protocol and provides compilation of code in a first language;

discovering a second compiler component that conforms to a set of interfaces included in ~~which implements~~ said prespecified protocol and provides compilation of code in a second language;

discovering a first design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in said first language;

discovering a second design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in said second language, wherein the discovery of the first compiler component, the second compiler component, the first design tool, and the second design tool is effected using an inter-process communication; and providing a framework which integrates said first compiler component, said second compiler component, said first design tool, and said second design tool to provide multi-language design functionality assisting a user in writing code comprising inter-language reference requirements, wherein the framework creates a multi-language compiler and a multi-language design tool based on the first language and the second language.

33. (Currently amended) A computer-readable storage medium for multi-language code editing comprising computer executable modules having computer executable instructions, said instructions comprising instructions for:

discovering a first compiler component which implements a prespecified protocol and provides compilation of code in a first language;

discovering a second compiler component that conforms to a set of interfaces included in ~~which implements~~ said prespecified protocol and provides compilation of code in a second language;

discovering a first design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in said first language;

discovering a second design tool that conforms to the set of interfaces included in ~~which implements a~~ the prespecified protocol and provides design assistance for code in said second language, wherein the discovery of the first compiler component, the second compiler component, the first design tool, and the second design tool is effected using an inter-process communication; and

providing a framework which integrates said first compiler component, said second compiler component, said first design tool, and said second design tool to provide multi-language design functionality incorporating background compilation, wherein the framework creates a multi-language compiler and a multi-language design tool based on the first language and the second language.

34. (Currently amended) A computer-readable storage medium for multi-language code compilation comprising computer executable modules having computer executable

instructions, said instructions comprising instructions for:

discovering at least two compiler components that each conform to a set of interfaces included in ~~which each implement~~ a prespecified protocol, wherein each of the at least two compiler components provides compilation of code in a corresponding language and the discovery of the at least two compiler components is effected using an inter-process communication; and

providing a framework which integrates each of said at least two compiler components to provide multi-language compilation, wherein the framework creates a multi-language compiler based on the corresponding languages of the at least two compiler components.